

REMARKS

The pending Office Action addresses and rejects claims 1-63. Applicants respectfully request reconsideration and allowance based on the amendments and remarks submitted herewith.

Amendments to the Claims

Applicants amend claims 2, 13, 30, 36, and 46 based on the informalities cited by the Examiner in the Office Action. Furthermore, Applicants amend claims 12 and 36 in response to the Examiner's assertion that there is no antecedent basis for the recitation "said expandable body distal tip" of claim 12 and "said expander pin bore" of claim 36. Applicants make no amendments pursuant to rejections based on 35 U.S.C. §§ 102 and 103. Claims 27 and 28 are cancelled. No new matter is added.

Claim Objections

The Examiner objects to claims 2-4, 13-15, 27, 28, 30-32, and 46-48 because of informalities detected by the Examiner. Applicants appreciate the Examiner's suggestions and have made the changes suggested by the Examiner, thereby obviating the basis for this rejection.

Rejections Pursuant to 35 U.S.C. § 112

The Examiner rejects claims 12 and 36-38 pursuant to 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the Examiner states that the recitations "said expandable body distal tip" in lines 1-2 of claim 12 and "said expander pin bore" in lines 3-4 of claim 36 have insufficient antecedent basis. While Applicants believe that proper antecedent basis exists in both cases, Applicants amend claims 12 and 36 to more clearly state the antecedent basis. Accordingly, Applicants obviate the Examiner's rejection of claims 12 and 36, as well as claims 37 and 38 because of their dependence from claim 36.

Rejections Pursuant to 35 U.S.C. § 101

The Examiner rejects claims 27 and 28 pursuant to 35 U.S.C. § 101 as claiming the same invention as that of claims 47 and 48, respectively, of prior U.S. Patent No. 6,733,506. Applicants cancel claims 27 and 28 in view of this double patenting rejection, and therefore the Examiner's rejection of claims 27 and 28 is no longer applicable.

Rejections Pursuant to 35 U.S.C. § 102(b)

U.S. Patent No. 6,332,778 of Choung

The Examiner rejects claims 29-31, 33-35, 40-43, 45, 46, and 48 pursuant to 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,332,778 of Choung ("Choung"), arguing that Choung discloses the claimed invention. Applicants disagree with the Examiner's rejection.

Independent claim 29 recites an apparatus for attaching tissue to bone that includes: an expandable body that both defines a bore and is configured to expand into bone; an expander pin that includes a shaft sized to be received in the bore of the expandable body such that when the expander pin is driven into the expandable body, the expandable body expands laterally to attach the expandable body to the bone; and a tissue attachment means that is associated with the shaft of the expander pin such that when the expander pin is driven into the expandable body, the tissue attachment means secures the tissue to the apparatus.

In accordance with 35 U.S.C. § 112, paragraph 6, "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." The term "tissue attachment means," as recited in claim 29, must therefore be interpreted to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. As disclosed in the patent application, in one embodiment the "tissue attachment means" is in the form of one or more lateral projections (225) that are configured to hold tissue, as shown in FIG. 14.

In another embodiment, the “tissue attachment means” is a plurality of transverse bores (227) and one or more lengths of suture (228) for tying a piece of tissue to bone, as shown in FIG. 39.

Choung does not teach or even suggest a lateral projection, a bore and suture, or equivalents thereof for attaching tissue to bone. As shown in FIG. 1 of Choung, the abutment (40) and the neck portion (20), which the Examiner asserts form the claimed “tissue attachment means,” do not include any lateral projections that will hold tissue. The abutment (40) does have a bore, however the implant (100) does not include any suture threaded through the bore for attaching tissue to bone.

Even if the abutment (40) and the neck portion (20) could be considered to be a “tissue attachment means,” neither is “associated with” the shaft (30) of the expander pin (16, 60), as further required by claim 29. Rather, the abutment (40) is attached to the neck portion (20), and the neck portion (20) is integrally formed on an upper portion of the fixture body (10). Thus, Choung further fails to disclose the claimed invention.

Accordingly, independent claim 29, as well as claims 30, 31, 33-35, 40-43, 45, 46, and 48 which depend therefrom, distinguishes over Choung and represents allowable subject matter.

Rejections Pursuant to 35 U.S.C. § 103(a)

Claims 1-28, 32, 36-39, 44, 47, and 49-63

The Examiner also rejects claims 1-28, 32, 36-39, 44, 47, and 49-63 pursuant to 35 U.S.C. § 103(a) as being obvious over Choung in view of various additional references. Of the rejected claims, only claim 1 is an independent claim, and claim 1, like claim 29, recites “a tissue attachment means associated with said shaft.” Accordingly, claim 1 distinguishes over Choung for the same reasons discussed above with respect to claim 29. None of the various additional references cited by the Examiner remedy the deficiencies of Choung. With specific reference to independent claim 1, U.S. Patent No. 6,162,236 of Osada is cited by the Examiner to teach a distal tip member that is made of a harder material than a proximal main member. However, Osada fails to remedy the deficiencies of Choung with respect to the “tissue attachment means” because it does not teach or

even suggest a lateral projection, a bore and suture, or equivalents thereof for attaching tissue to bone. The remainder of the art cited by the Examiner addresses less prominent features found in the dependent claims and thus do not remedy the deficiencies of Choung. Furthermore, it would not have been obvious to combine any of the other references cited by the Examiner with Choung, at least because Choung is directed toward a dental implant and none of the other references cited by the Examiner are even remotely applicable to a dental implant.

Accordingly, independent claim 1, as well as claims 2-26, 32, 36-39, 44, 47, and 49-63 which are dependent either from independent claim 1 or 29, distinguishes over Choung in view of the additional references cited by the Examiner and thus represents allowable subject matter.

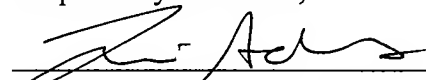
Conclusion

All pending claims are believed to be in condition for allowance. If the Examiner believes that an interview would facilitate the resolution of any outstanding issues, he is kindly requested to contact the undersigned.

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Respectfully submitted,



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